

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
4 January 2001 (04.01.2001)

PCT

(10) International Publication Number  
**WO 01/00838 A1**

- (51) International Patent Classification<sup>7</sup>: **C12N 15/31**,  
C07K 14/21, A61K 39/02, C07K 16/12, G01N 33/53,  
C12N 15/62
- (74) Agents: **PRIVETT, Kathryn, Louise et al.**; SmithKline  
Beecham, Corporate Intellectual Property, Two New Hor-  
izons Court, Brentford, Middlesex TW8 9EP (GB).
- (21) International Application Number: **PCT/EP00/05854**
- (22) International Filing Date: **23 June 2000 (23.06.2000)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:  
9915031.0 **25 June 1999 (25.06.1999)** **GB**
- (71) Applicant (for all designated States except US):  
**SMITHKLINE BEECHAM BIOLOGICALS S.A.**  
[BE/BE]; Rue de l'Institut 89, B-1330 Rixensart (BE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **THONNARD, Joelle**  
[BE/BE]; SmithKline Beecham Biologicals s.a., Rue de  
L'Institut 89, B-1330 Rixensart (BE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,  
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— With international search report.
- For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: **CLONING OF BASB110 ANTIGEN FROM MORAXELLA (BRANHAMELLA) CATARRHALIS**

(57) Abstract: The invention provides BASB110 polypeptides and polynucleotides encoding BASB110 polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are diagnostic, prophylactic and therapeutic uses.

PTO/PCT Rec'd 13 DEC 2001

RECEIVED

WO 01/00838 A1